IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: **Hindle et al.**	§ Group Art Unit: **2156**
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	§
Serial No.: **10/537,213**	§ Examiner: **Al Hashemi, Sana A.**
	§
Filed: **June 2, 2005**	§ Attorney Docket No.: **GB920020006US1**
	§
For: **Synchronizing Data in a**	§ Customer No.: **50170**
Distributed Data Processing System	§
	§

PETITION TO DIRECTOR FROM REQUIREMENT FOR RESTRICTION UNDER 37 C.F.R. § 1.144

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

     No fees are believed to be required. If, however, any fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

     In response to the Final Office Action dated May 15, 2009, Applicants respectfully traverse the requirement for restriction and furthermore petition from requirement for restriction under 37 C.F.R. § 1.144. Claims 1-5 and 24-31 are pending in

the present application. The Office presents a restriction requirement that states that Applicants must elect a group of claims from the groups designated as follows:

      Group I: claims 1-5 allegedly drawn to a method of synchronizing data, classified in class 707, subclass 203;

      Group II: claims 24-31 allegedly drawn to a middle tier computer used to form a new master data which does not synchronize the master data, classified in class 707, subclass 102.

The Final Office Action states that Group I, claims 1-5 is elected by original presentation. The Office then withdraws claims 24-31 from consideration as being directed to a non-elected invention.

Applicants respectfully submit that for a restriction to be valid, it must satisfy a two prong test as set forth in MPEP § 803:

> There are two criteria for a proper requirement for restriction between patentably distinct inventions:
>
> (A) The inventions must be independent (see MPEP § 802.01, § 806.04, § 808.01) or distinct as claimed (see MPEP § 806.05 - § 806.05(i)); and
>
> (B) There must be a serious burden on the examiner if restriction is required (see MPEP § 803.02, § 806.04(a) - § 806.04(i), § 808.01(a), and § 808.02).
>
>   If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.
>
> (MPEP § 803)

In the present case, the restriction requirement does not sufficiently address either criterion. The Final Office Action does not establish that the inventions are distinct other than to baldly state that they do not have to be used together. The Final Office Action also fails to show any serious burden on the Examiner to examine all of the **thirteen** claims in the application. Therefore, the Final Office Action does not set forth a proper requirement for restriction.

Applicants' representative conducted a telephone interview with the Examiner on July 21, 2009. Applicants' representative argued that the restriction requirement does not show that the inventions are distinct and that the Examiner has not established a serious

burden. No agreement was reached. Applicants' representative conducted a telephone interview with the Examiner's Supervisory Patent Examiner, Pierre Vital, on July 24, 2009. Mr. Vital agreed with Applicants' representative that the two groups of claims have a substantial number of overlapping features and would not present a serious burden on the Examiner. Mr. Vital stated that he would have the Examiner contact Applicants' representative. The Examiner contacted Applicants' representative on August 4, 2009, to indicate that her Supervisory Patent Examiner agreed with the Examiner that the restriction is proper and that the status of the Final Office Action will not change.

The restriction requirement is based on the alleged classification of claims in different classes and subclasses within the U.S. Patent and Trademark Office. First, the Final Office Action classifies the invention of claims 1-5 in class 707, subclass 203. Class 707 is to "DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA STRUCTURES. Subclass 200 is to "FILE OR DATABASE MAINTENANCE." Subclass 201, which is under subclass 200, is to "Coherency (e.g., same view to multiple users)," and is defined as follows:

> This subclass is indented under subclass 200. Subject matter further comprising means or steps for distributed and temporal database management to ensure presentation of the same data or view to one or a plurality of users.
>> (1) Note. Coherency is related to the maintaining of multiple copies of information in a database or a file in a manner which ensures data integrity amongst the plurality of copies, regardless of whether a single user or plurality of simultaneous users are accessing the information. When a plurality of users is accessing the multiple copies of information, then both concurrency and coherency concepts may be involved, and the subject matter is classified in the concurrency subclass above.
>> (2) Note. This subclass is directed to file and database coherency and may include file caching. Caching, per se, however, is classified elsewhere. In addition, cache memory entry replacement strategies are classified elsewhere.
>> (3) Note. This subclass is directed to file and database coherency and may include management of transactions against a database by means of commit procedures. Transaction management, per se, is classified elsewhere.
>> (4) Note. This subclass is directed to file and database coherency and may involve access control. Access control in combination with other data processing system methods or apparatus (e.g., memory), computer security, per se, and access control, per se, are classified elsewhere.
>> (5) Note. This subclass is directed to file and database coherency and may include recitations to shared memory. Managing shared memory,

however, is classified elsewhere. Further, data transferring between computers or digital data processing systems is classified elsewhere.

Subclass 203, which is under subclass 201, is to "Version management," and is defined as follows:

This subclass is indented under subclass 201. Subject matter further comprising means or steps for maintenance and management of multiple copies of database information or files on a computer.

(1) Note. Database concurrency, file or database coherency, and document version management are classified elsewhere in this class. See the SEE OR SEARCH THIS CLASS, SUBCLASS references below and also the line notes and search notes associated therewith.

(2) Note. Software component managing in a software development tool, software upgrading or updating (e.g., plural version management), and software installation are classified elsewhere. See the SEE OR SEARCH CLASS references below and also the line notes and search notes associated therewith.

Applicants contend that if claims 1-5 are properly classified under class 707, subclass 203, then claims 24-31 are also properly classified under class 707, subclass 203.

Independent claims 24 and 28 recite:

24. An apparatus in a middle-tier computer, comprising:
a processor; and
a memory coupled to the processor, wherein the memory comprises instructions which, when executed by the processor, cause the processor to:
receive, via a first software connector, at least one operation from a thin client computer, wherein the thin client computer **stores a copy of master data from a legacy computer** and executes the at least one operation on the copy of the master data;
sequentially replay the at least one operation on the master data at the legacy computer via a second software connector;
determine whether the at least one operation is successful; and
in response to a determination that the at least one operation is successful, **synchronize the master data** by applying the at least one operation via the second software connector to form new master data at the legacy computer, such that in response to a determination that the at least one operation is not successful, the middle-tier computer does not synchronize the master data. [emphasis added]

28. A computer program product comprising a computer recordable medium having a computer readable program recorded thereon, wherein the computer readable program, when executed on a middle tier computer, causes the middle tier computer to:
receive, via a first software connector, at least one operation from a thin client computer, wherein the thin client computer **stores a copy of**

master data **from a legacy computer** and executes the at least one operation on the copy of the master data;

       sequentially replay the at least one operation on the master data at the legacy computer via a second software connector;

       determine whether the at least one operation is successful; and

       in response to a determination that the at least one operation is successful, **synchronize the master data** by applying the at least one operation via the second software connector to form new master data at the legacy computer, such that in response to a determination that the at least one operation is not successful, the middle-tier computer does not synchronize the master data. [emphasis added]

Claims 24 and 28 also recite features "for distributed and temporal database management to ensure presentation of the same data or view to one or a plurality of users" according to class 707, subclass 201, and also features "for maintenance and management of multiple copies of database information or files on a computer" according to class 707, subclass 203.

       The Final Office Action classifies the invention of claims 24-31 in class 707, subclass 102. Subclass 100, under class 707, is to "DATABASE SCHEMA OR DATA STRUCTURE." Subclass 102, which is under subclass 100, is to "Generating database or data structure (e.g., via user interface)," and is defined as follows:

This subclass is indented under subclass 100. Subject matter including means or steps for generating database schema and data structures.

       (1) Note. This subclass accepts operator interface features for data structure development environments. Operator interfaces, per se, are classified elsewhere.

The Final Office Action provides no explanation or reasoning as to why the features of claims 24-31 are somehow directed to generating database schema and data structures. There are no features in claims 24-31 directed to a user interface or specifically directed to **generating** a database schema. For these reasons, Applicants submit that claims 24-31 should be classified in class 707, subclass 203, just as claims 1-5 are.

       Furthermore, the Final Office Action states that the invention of claims 24-31 is drawn to a middle tier computer (the first non-legacy computer of claim 1) used to "form" a new master data (synchronized from the copy of the master data by applying the at least one operation) which does not synchronize the master data. However, claim 24, for example, clearly recites "in response to a determination that the at least one operation is successful, **synchronize the master data** by applying the at least one operation via the

second software connector to form new master data at the legacy computer" [emphasis added]. Claims 24-31 recite substantially similar features as claims 1-5. The first non-legacy computer of claim 1 and the middle-tier computer of claim 24, for example, refer to the same computer in the embodiments in the disclosure (middle tier 315 in FIG. 3). Claims 1-5 and claims 24-31 all recite in response to a determination that the at least one operation is successful, synchronizing the master data by applying the at least one operation via the second software connector to form new master data at the legacy computer. Therefore, Applicants respectfully disagree with the Examiner's characterization that the subject matter of claims 24-31 "can be used together but they don't have to be together."

Applicants discussed the restriction requirement with the Examiner in a telephone interview on July 21, 2009. In the Interview Summary issued July 27, 2009, the Examiner states that claim 24 recites that if the operation is not successful, the middle-tier computer does not synchronize the master data. The Examiner then concludes that this clearly shifts the focus to the middle-tier, which is allegedly classified in class 707, subclass 102 (data structure), instead of the focus on the novelty of claim 1, which is the data synchronization. Applicants respectfully disagree. Claim 24 clearly recites "in response to a determination that the at least one operation is successful, **synchronize the master data** by applying the at least one operation via the second software connector to form new master data at the legacy computer" [emphasis added]. Therefore, claim 24 cannot possibly be interpreted to not have a focus of synchronization.

Furthermore, the "focus" of claims 24-31 to "data structure" proposed by the Examiner appears to be completely arbitrary, because claim 24 does not include any significant features concerning a new database structure, a structured language document, a flat file format, a multi-dimensional database, a user interface for a data structure development environment, or the like. It appears that the separate classification of claims 24-31 is a straw man intended to support the restriction requirement that otherwise has no merit.

Still further, claim 5, which is in the first group, includes the same feature of responsive to a determination that the at least one operation is not successful, not synchronizing the master data. If the Examiner interprets this feature as shifting the

focus of novelty with respect to claim 24, then the Examiner **must** make the same interpretation for claim 5. It appears that the Examiner is picking and choosing features that define the "focus" of the claims while ignoring other features, even though both groups of claims include all of the features in question. For example, the first group (claims 1-5) clearly includes the features of a middle-tier computer (the first non-legacy computer in claim 1) and responsive to a determination that the at least one operation is not successful, not synchronizing the master data (claim 5), while the second group (claims 24-31) clearly includes the feature of synchronizing the master data by applying the at least one operation (independent claims 24 and 28). One cannot select features from the first group to define the "focus" of the invention and ignore those same features present in the second group.

Moreover, the restriction requirement does not show any serious burden on the Examiner to examine all of the claims in the application. For instance, claim 1 recites, "storing a master data in at least one legacy computer system," "storing a copy of the master data in a second non-legacy computer," and "executing, by said second non-legacy computer, at least one operation on said copy of the master data," and claim 24 recites, "wherein the thin client computer stores a copy of master data from a legacy computer and executes the at least one operation on the copy of the master data." Claim 1 recites, "sending, by said second non-legacy computer, said at least one operation to said first non-legacy computer," and claim 24 recites, "receive, via a first software connector, at least one operation from a thin client computer." Claim 1 recites, "replaying, by said first non-legacy computer, said at least one operation," "determining whether the at least one operation is successful ," and "in response to a determination that the at least one operation is successful, synchronizing said master data by applying said at least one operation to form a modified copy of the master data," and claim 24 recites, "sequentially replay the at least one operation on the master data at the legacy computer via a second software connector," "determine whether the at least one operation is successful," and "in response to a determination that the at least one operation is successful, synchronize the master data by applying the at least one operation via the second software connector to form new master data at the legacy computer." One cannot search and examine the above features of claim 1 without also searching and examining

the above features of claim 24. The same is true for all of claims 24-31. Thus, there clearly is no burden on the Examiner to examine claims 24-31, and the restriction is improper.

Thus, for the reasons set forth above, Applicants respectfully submit that the Examiner has not shown that the inventions are distinct and has failed to establish a serious burden in examining all of the claims set forth in the application. Therefore, the Examiner has not set forth a proper requirement for restriction as required by the MPEP § 803. It is respectfully urged that the restriction requirement is improper and should be withdrawn.

Respectfully submitted,

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Stephen R. Tkacs
Reg. No. 46,430
Walder Intellectual Property Law, P.C.
17330 Preston Road, Suite 100B
Dallas, TX 75252
(972) 380-9475
AGENT FOR APPLICANTS